On-Line Instruments (continued)

For line-powered, indicating, analog transmitters we offer:

- The SCA-1 for simple basic applications
- The more powerful 9030 Plus for more comprehensive capabilities

Both units are housed in NEMA 4X weatherproof enclosures for the toughest conditions, provide 4-20 mA outputs and essential electrical isolation between the input and output circuits. The SCA-1 displays and transmits corrosion rates up to 20 mpy (400 µm/y) in common conductivity waters (see graph).

The 9030 Plus is available in a one or two probe configuration, and provides both analog 4-20 mA output and datalogging capabilities. Its SRC provides a wider range of operation (see graph), and it incorporates the ever useful pitting tendency. The unit is particularly attractive for applications where the analog output feeds into the plant process control system and the data logging function is available for independent use by the chemical vendor.

For blind field-mounting transmitters we offer:

- The analog 9020 and 9020 OEM
- The digital explosion proof E-9020

All units share the same increased performance front end (see graph) even with long probe to transmitter cables. The analog units are 4-20 mA loop-powered, with one loop for corrosion rate and one for pitting tendency. The 9020 OEM is supplied without the NEMA 4X enclosure of the 9020 for installation in other instrumentation enclosures, such as chemical vendor instrumentation systems.

The digital explosion proof E-9020 transmitter is ideal for plant application in electrically hazardous areas. It operates on an economical 24 VDC/RS 485 multi-drop cable for up to 32 transmitters, which can be a mix of E-9020 and Microcor transmitters for applications with mixed aqueous and non-aqueous monitoring points. The E-9020 integrates easily into our advanced ICMS3 systems for complete corrosion management solutions.

We are ready to meet all of your corrosion monitoring needs.

Rohrback Cosasco Systems (RCS) has been the world leader in corrosion monitoring since 1950. In addition to designing and manufacturing industry leading equipment and systems, we also provide:

- System Engineering Services
- Installation
- Commissioning
- Cosasco Field Services
- Data Interpretation and Corrosion Consulting
- Ongoing Support for Equipment And Software
- Remote Monitoring through a variety of communications channels

Please contact us for more information about our systems and services.
**Advanced LPR Corrosion Rate Monitoring**

The Corrater® family is the most advanced electrochemical field instrumentation available for measuring corrosion rate and pitting tendency. Through patented solution resistance compensation (SRC), we have greatly extended the operating range beyond traditional two- and three-electrode Linear Polarization Resistance (LPR) methods (See Graph and ASTM G96-90(2001)e1). As pioneers of the corrosion monitoring industry, RCS has developed an unsurpassed pedigree of performance and reliability that has made the Corrater range the worldwide industry standard.

The large equipment selection and wide operating range of Corrater Systems offer:

- A pro-active approach to managing asset life and optimizing chemical treatment costs
- Capture of corrosion rates in moments with just a single reading, more accurately than competitive systems
- A field-proven pitting tendency from an electrochemical current noise sample, more reliable than competitive noise methods

Corrater products must be installed in aqueous environments because electrochemistry fundamentals require corrosion measurement to occur in a water phase that completely wets and interconnects the electrodes. In low water-content processes, such as most oil and gas systems, or where significant organics are present (>5%), screening of the electrodes occurs rapidly. This causes electrochemical and electrochemical noise methods to become noisy and inaccurate necessitating a technology change to metal loss methods to provide reliable corrosion data. This is provided by Corrosometer® systems or the high resolution, rapid response, Microcor® technology. For more details see separate brochures.

**For Water Applications**

Model 9000 Plus is ideal for normal conductivity waters, and the AquaMate™ with SRC for an extended operating range. Both provide low-cost manual monitoring for systems with relatively stable corrosion.

**Portable Instruments**

RCS compact portables offer economy, flexibility, and portability that make them an essential pocket instrument for every water treatment engineer. Corrosion data is captured in moments, from Corrater probes installed continuously in each system. The economical

**Advanced LPR Corrosion Rate Monitoring**

**Corrater Probes**

All Corrater probes have the economy of replaceable electrodes that double as corrosion coupons, providing a significant advantage over other electrochemical and electrochemical noise probe designs with fixed electrodes. The average corrosion rate of the electrode, determined as coupon, is correlated with that from the electrochemical measurements, allowing verification of all of the important empirical and electrochemical scaling factors, which cannot be achieved by electrochemical measurements alone.

**On-line Instruments**

On-line instruments are essential in plants where continuous supervision of corrosion is required to maintain system control, prevention of corrosion upsets, regulation of corrosion inhibition, and the protection of valuable assets.

**Dataloggers for Fast Installation and Simple Analysis with Corrdata® Plus Software**

Dataloggers collect continuous corrosion history in water applications with less stable conditions and identify the magnitude and timing of all corrosion upsets. Their many features make them the preferred choice for many situations:

- **Flexibility to operate anywhere, anytime through battery power**
- **Just minutes to install and run**
- **Simple data transfer directly to a PC, or via our handheld portable instrument**
- **Certified Intrinsically Safe (UL/CSA/ATEX) for use in electrically hazardous areas**
- **Quick and easy data analysis with Corrdata Plus Software**

Remote Data Collectors (RDC’s) record corrosion probe data at pre-programmed intervals, and transfer it to a PC as convenient, either by direct connection or via one of the handheld portable Mate, Mate II or Checkmate instruments. Each portable has the capacity to store data from up to 50 RDC’s. The Mate II has the added capability to collect readings from RDC’s or direct from probes.

**Comparison of Features of Corrater Instruments**

<table>
<thead>
<tr>
<th>Comparative Instrument Features</th>
<th>9000 Plus</th>
<th>AquaMate</th>
<th>RDC-CAT</th>
<th>Mate II</th>
<th>Spa/Al</th>
<th>9030 Plus</th>
<th>9020</th>
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* *ASTM G96-90(2001)e1 Standard Guide for in-situ monitoring of corrosion in plant applications (Electrical and Electrochemical methods)
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Please contact us for more information about our systems and services:

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Toll Free in the USA: 800-635-6898
www.rohrbackcosasco.com

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